

**What is claimed is:**

1. A method for screening for anti-thrombotic/anti-platelet activity comprising:

5 a) contacting platelets *in vitro* with a compound to be tested for potential anti-thrombotic/anti-platelet activity; and

10 b) monitoring the ability of said compound to inhibit thrombin-induced platelet aggregation through inhibition of GP Ib, PAR-1 or PAR-4 receptor binding, wherein the ability to inhibit GP Ib, PAR-1 or PAR-4 binding is indicative of anti-thrombotic/anti-platelet activity of the compound.

2. A method for screening for anti-thrombotic/anti-platelet activity comprising:

15 a) contacting platelets *in vitro* with a compound to be tested for potential anti-thrombotic/anti-platelet activity; and

20 b) monitoring the ability of said compound to inhibit thrombin-induced platelet aggregation through inhibition of  $\alpha$ -thrombin,  $\beta$ -thrombin, or  $\gamma$ -thrombin pathways wherein the ability to inhibit  $\alpha$ -thrombin,  $\beta$ -thrombin, or  $\gamma$ -thrombin pathways is indicative of anti-thrombotic/anti-platelet activity of the compound.